



UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
10/10/97	10/10/97	EXAMINER	

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/574,461	Applicant(s) A.D. Barone et al.
Examiner Neal A. Musto	Group Art Unit 1818

Responsive to communication(s) filed on 30 Jan 1997

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-36 is/are pending in the application.

Of the above, claim(s) 16-36 is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-15 is/are rejected.

Claim(s) 2 is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 11 & 4

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Claims 1-36 are pending.

Claims 16-36 are withdrawn from further consideration by examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention. Election was made **without** traverse in Paper No. 10.

5 Claims 1-15 are currently under consideration.

Drawings

2. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Objections

10 3. Claim 2 is objected to because of the following informalities: comprise should be changed to comprises. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

15 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds *et al* [Reynolds *et al.* 1992], in view of Pease *et al* [Pease *et al.* 1994].

Reynolds *et al* teach the preparation of labeled (*viz.*, psolalen) oligonucleotides on a solid support and their subsequent release and analysis by a standard chromatographic technique (*viz.*, reverse-phase HPLC). They do not teach the preparation of the oligonucleotides by a polymer array protocol.

However, Pease *et al* teach the synthesis of oligonucleotide arrays on solid phase substrates as well as means to label these arrays with a fluorescent phosphoamidite. Thus, it would have been *prima facie* obvious to a person having ordinary skill in the art at the time the invention was made to analyses the oligonucleotides arrays following their synthesis and labeling as taught by Pease *et al* by liberating the labeled polymers and analyzing them via standard chromatographic procedures as taught by Reynold *et al* because it was commonplace and routine to evaluate and characterize peptides and oligonucleotides synthesized by solid phase techniques with standard chromatographic and analytical procedures (*e.g.*, HPLC, ion exchange chromatography, electrophoresis or gel filtration). Therefore, one of ordinary skill in the art at the time the invention was made would be motivated to do so since it was known in the art that these techniques were useful in the analysis of oligomer populations such as those derived from library synthesis.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neal A. Musto, Ph.D. whose telephone number is (703) 305-

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4505. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiners voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald E. Adams, Ph.D. can be reached at (703) 308-0570. The fax phone number for Group 1800 is (703) 305-
5 3014 or (703) 308-4242. Any inquiry of a general nature or relating to the status of this application should be directed to the Group 1800 receptionist whose telephone number is (703) 308-0196.



PONNATHAPURA ACHUTAMURTHY
PRIMARY EXAMINER
GROUP 1800

Neal A. Musto, Ph.D.
FN085744.1
August 1, 1997